

Body Image and Social Anxiety of Obese Young Women

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Abstract. The aim of this study is to find out the correlation between body image and social anxiety in obese adolescent girls. Adolescent girls who are obese will tend to experience social anxiety because of the negative body image that appears in them. The study was conducted on 129 obese adolescent girls aged 12-21 years old. The data was collected using a questionnaire of MBSRQ-AS (Multidimensional Body-Self Relations Questionnaire-Appearance Scales) and Social Anxiety Scale for Adolescent (SAS-A). The data was analyzed by Spearman's Rho using IBM SPSS Statistics 22.0 for Mac. The result showed that social anxiety has significant negative correlation with appearance evaluation ($\rho = 0,000$ $r=-0,462$), body area satisfaction ($\rho = 0,000$ $r=-0,415$), and self-classified weight ($\rho = 0,004$ $r=-0,252$). However, there is a positive significant correlation between social anxiety and overweight preoccupation with the level of significance $\rho = 0,024$ and correlation coefficient is 0,199. Therefore, there is no correlation between appearance orientation with social anxiety because the level of significance is 0,995.

Keywords: *Adolescent girls; body image; obesity; social anxiety*

Introduction

A distinctive feature in the development of adolescents is the occurrence of puberty. At puberty, adolescents experience biological changes that affect their physique. This is because the hormones in the body work and cause secondary growth that indicates readiness in the ability to reproduce. The work of this hormone spurs physical changes that take place very quickly in a regular and sustainable period (Batubara, 2010). One of the physical changes affected by the hormones that appear during puberty is weight gain. Weight gain mainly occurs due to changes in body composition. In boys it occurs due to increased muscle mass, while in girls it occurs due to increased fat mass (Coal, 2010). This change in body composition then makes adolescent girls dissatisfied with the state of their bodies due to the increase in fat in their bodies (Santrock, 2011).

Uncontrolled fat gain in the body can lead to the onset of excess weight to obesity. Obesity is an excessive accumulation of fat in the body (NIDDK, 2012). Obesity that occurs in adolescents will affect the interactions they have with the social environment. Adolescents with obesity will become inferior and withdraw from the social environment. This is because in obese adolescents there will be a negative stigma that can cause social anxiety and low life satisfaction because they are more often rejected and ostracized by their peers (Nurvita & Handayani, 2015). Adolescents who are stigmatized because of their weight or body shape are likely to fail to acquire normal social developmental abilities and find it difficult to establish relationships with their peers (Pearce, Boergers, & Prinstein, 2002).

Difficulties in establishing relationships with the social environment will have more influence on adolescent girls. The results of a study conducted by Pearce, Boergers, and Prinstein (2002) it is known that adolescent girls who are obese will become victims in relation to peers. Teenage girls will get more ridicule from their peers about their physical condition.

Adolescent girls are often also shunned by their peers because of their physical condition, even though the perception of the importance of relationships with peers is more important by adolescent girls than by adolescent boys (Pearce, Boergers, & Prinstein, 2002). This then makes individuals feel a sense of fear of bad evaluations given by others. The fear of poor evaluation of the environment is one of the characteristics of social anxiety.

Social anxiety or social anxiety is an excessive fear in the individual that makes the individual choose to avoid certain social situations that allow the individual to receive negative judgments or evaluations from others (American Psychiatric Association, 2013). Individuals with social anxiety disorders will show the presence of discomfort and *distress*. They are dissatisfied with the relationships that exist, this is due to the tendency of individuals to think that they will do things that can embarrass themselves (Ford, Liebowitz, & Andrews, 2007). When in a social situation that is considered unpleasant, individuals with social anxiety will show physical signs, namely a faster heart rate, limbs

shaking, sweating, nausea, changing facial expressions, and tension (Morris & March, 2004).

According to the DSM-V, 75% of individuals begin to experience social anxiety at the age of 8-15 years (American Psychiatric Association, 2013). The onset of social anxiety that begins in adolescence can be linked to several related factors such as the environment and genetic factors. Bad experiences received by adolescent girls such as poor acceptance of the environment, negative stigma and embarrassing experiences obtained from the surrounding environment can influence the onset of social anxiety (Bandelow, Torrente, & Ruther, 2005). This negative experience that obese adolescent girls get about their body then affects the formation of concepts towards the body that are owned which is later because these concepts or perceptions affect social anxiety.

Research conducted by Pramitasari and Ariana (2014) states that there is a significant relationship between physical self-concept and social anxiety. Furthermore, research conducted by Cash, Thériault, and Annis (2004) showed that the aspects that exist in *the body image* have a significant relationship with interpersonal abilities. Therefore, it can be said that a positive *body image* is in line with the high ability to connect with others, on the contrary, dissatisfaction with *the body image* will be in line with the high negative evaluation they do on themselves and risk causing social anxiety.

Body image is an individual experience in the form of perceptions of body shape and body weight, as well as behaviors that lead to an individual's evaluation of their physical appearance (Cash & Pruzinsky, 2002). *Body image* has an important role for adolescents in the process of development. This is because during their development, adolescents have a great interest in the body image they have (Santrock, 2011). Adolescents will give subjective assessments related to the physical condition they have; those assessments can be both positive and negative judgments. If they are satisfied with their physical condition, then a positive assessment arises, and *body image satisfaction* develops. On the contrary, if the assessment is negative then they will develop the concept of *body image dissatisfaction* in themselves. *Body image dissatisfaction* is what can then lead to social anxiety because when individuals are dissatisfied with their physical

appearance, then they will feel anxious about people's assessment of their physical appearance (Annis, Cash, & Hrabosky, 2004).

Adolescent girls with obesity tend to be dissatisfied with their physical condition. Adolescent girls feel that they will be happier, healthier, and become more attractive when they have a thin body (Wertheim & Paxton, 2002). Adolescent girls' dissatisfaction *with their body image* has a great influence from their peer environment. If the peer environment attaches great importance to physical appearance and weight, then adolescents will increase their focus on physical appearance to the point of being able to increase dissatisfaction with body image. When adolescents do not have a body shape according to the ideal shape of their peer environment, adolescents will receive negative comments that can reduce *body image* and quality of life (Wertheim & Paxton, 2002). They also have a great opportunity to become victims of *bullying* by their peers. This can then make adolescent girls with obesity choose to avoid gathering in a social environment.

Based on the elaboration of the facts above, the author achieves an assumption that adolescent girls with obesity tend to experience social anxiety. Social anxiety experienced by adolescent girls with obesity is due to the negative *body image* that appears in everyone. To be able to prove this assumption, the authors then conducted this study in the hope that it would be possible to find out whether *the body image* in adolescent girls who are obese has a relationship with social anxiety.

Method

Types of Research

This research is a non-experimental quantitative study to determine the relationship between *body image and* social anxiety. Data collection was carried out by distributing questionnaires that measured *body image* and social anxiety.

Research Subjects

This study used *a non-probability sampling technique*, namely *purposive sampling*. The subjects in this study were 129 people who were adolescent girls aged 12-21 years and were obese. The research subjects were obtained through social media networks, then filtered by filling out an initial questionnaire to find out whether participants were

obese or not. The provision that individuals said to be obese are, those who have a body mass index of more than 27 kg/m².

Measuring Instruments

The measuring instruments used in this study are:

1. MBSRQ-AS (*Multidimensional Body-Self Relations Questionnaire-Appearance Scales*)

There are 5 aspects in this measuring instrument, namely *appearance evaluation*, *appearance orientation*, *body area satisfaction*, *overweight preoccupation*, and *self-classified weight*. MBSRQ-AS has 34 items, which is a shortened version of MRSA which originally had 68 items. This measuring instrument consists of items *favorable* and *unfavorable*. The statement contained in the item *favorable* is a statement that supports the object of attitude, while in item *unfavorable*, it contains a statement that is opposite to the object of attitude. Each statement will have five answer choices, namely very non-conforming (STS), non-conforming (TS), less appropriate (KS), appropriate (S), and very appropriate (SS). Later, the subject is asked to choose one of the five answer choices. The reliability of each dimension on the MBSRQ-AS measuring instrument is 0.745 in the *appearance evaluation* dimension, 0.674 on the *appearance orientation* dimension, 0.809 on the *body area satisfaction* dimension, 0.742 on the *overweight preoccupation* dimension, and 0.904 on the *self-classified weight* dimension.

2. SAS-A (*Social Anxiety Scale for Adolescent*)

In this study, the *Social Anxiety Scale for Adolescent* (SAS-A) measuring instrument was used to measure social anxiety variables. This measuring instrument is arranged based on three dimensions, namely *Fear of Negative Evaluation* (FNE), *Social Avoidance and Distress-New* (SAD-New), and *Social Avoidance and Distress-General* (SAD-G). Each item in this measuring instrument has five answer choices with different weights on each of them. The five item options are never (TP), rarely (J), sometimes (KD), often (SR), and always (SL). The reliability of this measuring instrument is 0.936.

Data Analysis

Researchers conducted a correlation test to find out the relationship between the two variables, namely *the body image* variable and the social anxiety variable. The

correlation test used is non-parametric with *spearman* technique using *IBM SPSS Statistics 22.0 for Mac*.

Result

Table 1.
[Correlation between variables]

		Social Anxiety	
<i>Spearman's Rho</i>	<i>Appearance evaluation</i>	Correlation Coefficient Sig. (2-tailed) N	-.426** .000 129
	<i>Appearance orientation</i>	Correlation Coefficient Sig. (2-tailed) N	-.001 .995 129
	<i>Body area satisfaction</i>	Correlation Coefficient Sig. (2-tailed) N	-.415** .000 129
	<i>Overweight preoccupation</i>	Correlation Coefficient Sig. (2-tailed) N	.199** .024 129
	<i>Self classified weight</i>	Correlation Coefficient Sig. (2-tailed) N	-.252* .004 129

Based on the correlation test that has been carried out, it is known that *appearance evaluation* has a correlation coefficient of -0.426 and a significance of 0.000 to social anxiety. This means that the appearance evaluation dimension is negatively correlated with social anxiety, where when the *subject's appearance evaluation* is low, the social anxiety value is high. The next dimension is the dimension of the body area satisfaction, from the results of the correlation test it is known that the significance value is 0.000 and the correlation coefficient is -0.415. This means that the dimension of *body satisfaction* is negatively correlated with social anxiety where when the *body satisfaction* score is low, the

social anxiety score is high and vice versa. In line with *the dimensions of appearance evaluation* and *body area satisfaction*, the *dimension of self-classified weight* has a negative correlation with social anxiety because the value of the correlation coefficient shown is -0.252 and the significance value is 0.004. The *overweight preoccupation* dimension has a correlation coefficient value of 0.199 and a significance of 0.024 which can be concluded that the dimension is positively related to social anxiety, where when the *preoccupation with overweight* score is high, the social anxiety score is also high. Unlike the other dimensions that correlate with social anxiety, *the appearance orientation* dimension has no relation to social anxiety. This is due to the resulting significance value. The *appearance orientation* dimension has a significance value of >0.05 , which is 0.995.

Although the four dimensions are related to social anxiety, the strength of the relationship that occurs varies between dimensions. In the dimensions of *appearance evaluation* and *body satisfaction*, the strength of the correlation between the two dimensions and social anxiety can be said to be moderate. This is because both have a correlation coefficient value between 0.30-0.49 (Cohen, 1998 in Pallant, 2005). Meanwhile, the strength of the correlation between *the overweight preoccupation* dimension and *the self-classified weight* dimension can be said to be low because the value of the correlation coefficient ranges in the range of 0.10-0.29 (Cohen, 1988 in Pallant, 2005).

Discussion

In previous studies, it was found that the attention given to *body image* was related to social anxiety (Dixit & Luqman, 2018). Research conducted by Tarkhan, Esmailpour and Tizdast (2013) also found a negative relationship between social anxiety and *body image* in female students. The results of this study show how the relationship between the dimensions of *the body image* and social anxiety in adolescent girls who are obese.

Changes in body shape experienced by adolescents, especially fat gain in adolescent girls who are obese affect the development of negative body image (Levine & Smolak, 2002). A negative body image can develop when the adolescent feels different

to his peers, because in adolescence adolescents tend to want to feel the same and be accepted by their environment (Tarkhan, Esmaeilpour, & Tizdast, 2013). Adolescents will pay more attention and regularly pay attention to their appearance, when the coveted self-image does not match the real self, then the probability of anxiety will be even higher. This difference also causes anxiety about the existence of possible evaluations in the surrounding environment, so to avoid these evaluations, adolescents often choose to avoid social situations. It is this avoidance of social situations that is one of the indicators of social anxiety (American Psychiatric Association, 2013).

Based on the results of the data analysis obtained, it shows a correlation between several dimensions in *the body image* and social anxiety, namely in the dimensions of *appearance evaluation*, *body area satisfaction*, *overweight preoccupation*, and *self-classified weight*. The direction of the relationship that the dimensions of *appearance evaluation*, *body area satisfaction*, and *self-classified weight* have to social anxiety is negative, where when these dimensions are of high value, then social anxiety will be low and vice versa. Meanwhile, in the *overweight preoccupation dimension*, the direction of the relationship is positive which means that when the dimension is of high value, then social anxiety will also be high. Unlike these dimensions related to social anxiety, the *appearance orientation* dimension has no relation to social anxiety.

The *appearance evaluation* dimension shows a significant relationship with social anxiety. The results of this study are in accordance with research conducted by Davison and McCabe (2006) that negative evaluations of the appearance that young women have have a negative correlation with relationships with peers, depression, and social anxiety. Research conducted by Archibald (2010) also revealed a negative relationship between *appearance evaluation* and *body area satisfaction* with anxiety in female students.

Body Area Satisfaction is known to have a negative relationship with social anxiety in adolescent girls who are obese, where when satisfaction with the body is low, social anxiety increases. This is in accordance with research carried out by Cash, Thériault, and Annis (2004) which posits that the individual's discontent with the body possessed has a relationship with social anxiety in the fear of the evaluation that others will give. This is related to interpersonal relationships that are better established in

adolescent girls both with close friends and with friends of different sexes where when adolescent girls feel satisfied with their bodies, the interpersonal relationships they have will be positive (Chen, 2015).

The *overweight dimension of preoccupation* shows a significantly positive relationship with social anxiety. *Overweight preoccupation* itself measures an individual's anxiety about obesity and an individual's alertness to weight. This means that the more individuals feel anxious and alert to obesity, the higher the social anxiety that occurs. According to research conducted by Annis, Cash and Hrabosky (2004) *overweight preoccupation* in overweight women has a relationship with social anxiety.

Self-classified weight has a negative relationship with social anxiety where when individuals classify their bodies into increasingly heavy weight, the value of social anxiety increases. The results of this study are in line with research conducted by Barahamand and Shahbazi (2013) on 843 men and women in Iran that in women, the attention given to weight is getting higher and it correlates with social anxiety. Dissatisfaction with the weight possessed has a correlation to social anxiety.

The dimensions *in the body image* that have a correlation with social anxiety in this study are dimensions that describe *self-perception*, how the perception is of oneself. Social anxiety will increase when *the self-perception* that the individual has is negative. According to Hofmann (2007) social anxiety arises when the perception of the individual is not able to fulfill the desire to give the desired impression to others. Thus, when an individual's evaluation of appearance, the individual's satisfaction with the body, the preoccupation of excess weight, the self-categorization of the weight that the individual has is negative, then social anxiety can arise because the individual has the perception that they are not able to give a good impression of himself in those things to others.

Unlike these four dimensions, the *appearance orientation* dimension is known to have no significant relationship with social anxiety. This means that the investments or actions that individuals make regarding their appearance have no connection with the social anxiety that occurs to them. The results of this study are in accordance with research conducted by Bolton, Pruzinsky, Cash, and Persing (2003) in plastic surgery

patients where it is known that there is no difference between *appearance orientation* before and after surgery, as well as the fear of evaluation.

Conclusion

The conclusion that can be drawn based on the analysis and elaboration in this study is that there is a significant relationship in *the dimensions of body image*, namely, the dimensions of *appearance evaluation*, *body area satisfaction*, *overweight preoccupation*, and *self-classified weight* with social anxiety in adolescent girls who are obese. In addition, it can be concluded that there is no relationship between *appearance orientation* and social anxiety in adolescent girls who are obese. Although this study was shown to find a relationship between *body image* and social anxiety in adolescent girls who are obese, the relationship between the two is moderate.

Suggestion

Researchers can then read more literature to find out what factors have a greater association with social anxiety variables. In addition, researchers can further add other variables in this study to strengthen the relationships they have.

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